

Amendments to the Claims

This listing of claims will replace all prior versions, and listings of claims in the application.

1. (Cancelled)
2. (Cancelled)
3. (Cancelled)
4. (Cancelled)
5. (Cancelled)
6. (Cancelled)
7. (Cancelled)
8. (Cancelled)
9. (Cancelled)
10. (Cancelled)
11. (Cancelled)
12. (Cancelled)
13. (Cancelled)
14. (Cancelled)
15. (Cancelled)

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16. (Cancelled)

17. (Cancelled)

18. (Cancelled)

19. (Cancelled)

20. (Cancelled)

21. (Cancelled)

22. (Cancelled)

23. (Currently Amended) A method of deploying a stent apparatus in a bifurcated vessel, the bifurcated vessel comprises a main vessel having an ostium leading into a branch vessel, the method comprising:

providing a main stent, which has a proximal end, a distal end and a side opening between the proximal and distal ends, on a first catheter;

advancing said first catheter via a first guidewire into the main vessel so that said side opening is substantially aligned with the ostium leading into the branch vessel;

~~introducing a first guidewire into the main vessel;~~

~~applying to said first guidewire a first catheter including a main stent, said main stent having a proximal end, a distal end, and a side opening between said ends;~~

~~advancing said first catheter along said first guidewire to a location in said main vessel wherein said proximal end and said distal end of said main stent span the ostium, and wherein said side opening is substantially aligned with the ostium;~~

~~partially expanding said main stent, so as to at least partially deploy said main stent in its approximate position;~~

~~inserting a second guidewire and a second catheter through said side opening of said main stent into the branch vessel, for precisely locating said main stent with respect to the ostium;~~

expanding said main stent in its position;

removing said first catheter;

advancing via a said second guidewire disposed in ~~into~~ the branch vessel a second ~~third~~ catheter, having a flareable stent in a state of compression, wherein said flareable stent comprises a proximal end and a distal end, and wherein said proximal end comprises a flareable portion initially in an unflared configuration;

positioning said second ~~third~~ catheter within the branch vessel so that said proximal end of said flareable stent extends into the main vessel;

positioning said flareable stent with respect to the ostium by at least allowing said flareable portion in said unflared configuration to be flared approximately radially to a longitudinal axis of said flareable stent, so as to precisely position said flareable stent with respect to the ostium and to the branch vessel; and

expanding said flareable stent in the branch vessel to deploy said flareable stent in its position within the branch vessel.

24. (Previously Presented) The method of Claim 23, wherein allowing said flareable portion to be flared is accomplished by removal of an outer sheath.

25. (Currently Amended) The method of Claim 23, wherein said second guidewire is introduced after said main stent has been expanded within the main vessel.

26. (Currently Amended) The method of Claim 23, wherein said second guidewire is introduced simultaneously with said first catheter and said main stent.

27. (Currently Amended) The method of Claim 23, wherein expanding of said main stent and said flareable stent are performed by balloon catheterization.

28. (Previously Presented) The method of Claim 23, wherein advancing said first catheter is done using radiopaque markers.

29. (Currently Amended) The method of Claim 23, wherein said flareable stent includes ~~positioning said third catheter is done using~~ radiopaque markers.

30. (Cancelled)

31. (Currently Amended) The method of claim ~~34~~ 30, wherein said flareable ~~stent portion~~ is covered with a removable sheath for keeping said flareable ~~stent portion~~ in an unflared state, ~~whereby allowing said flareable portion to flare is by removing said removable sheath so as to allow said flareable portion to flare.~~

32. (Currently Amended) The method of Claim ~~34~~ 30, wherein ~~positioning~~ said flareable stent includes ~~is done using~~ radiopaque markers.

33. (Currently Amended) The method of Claim ~~35~~ 30, wherein expanding of said ~~flareable~~ flared stent is performed by balloon catheterization.

34. (Currently Amended) A method, ~~for deploying a flareable stent, the~~ method comprising:

providing a flareable stent ~~which comprises a first end and a second end, said second end comprises a flareable portion;~~

introducing ~~positioning~~ said flareable stent in a vessel;

allowing said flareable ~~stent portion~~ to flare; and

directing said flared ~~flareable~~ stent to an edge of said vessel; and ~~using said flareable portion;~~

expanding said flared ~~flareable~~ stent.

35. (New) The method of Claim 34, further including
positioning said flared stent to contact said edge of said vessel and, thereafter,
expanding said flared stent.

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